ISIS - Feature #1438

Isis needs to handle ellipse intersection failures better when the shape model is a DEM.

2013-01-17 10:11 PM - Debbie Cook

Status:	Closed		
Priority:	Normal		
Assignee:	Jean Backer		
Category:	API		
Target version:	3.4.13 (FY16 R3 2016-08-31 Aug)		
Impact:	This change will allow us to find more surface points beyond the target body ellipsoid when an equatorial cylindrical shape model is used. This could add more valid output pixel values for images with limb data.	**Software Version:**	

Description

From the code in the DemShape intersectSurface method, we have historically tested to see if we can intersect the ellipsoid. If we can't then we made the assumption that we could not intersect the DEM. This of course isn't always true as the DEM could be above the surface of the ellipsoid. For most images we really wouldn't notice. It has recently (Aug 2011) come into play when we try to intersect images containing a limb and spiceinit'ed with a DEM (e.g., Vesta and soon Mercury). This implies that info at the limb will not always be computed. In the future we may want to do a better job at handling this special case.

Related issues:

Related to ISIS - Bug #1389: spiceinit - major hang when dealing with a limb ...	**Closed**
Related to ISIS - Bug #1008: phocube limb problem on Vesta (Dawn FC)	**Acknowledged**
Related to ISIS - Crash #2149: cnetref - fails with an error when selecting h...	**Closed**

History

#4 - 2013-08-15 10:34 AM - Anonymous

- Tracker changed from Recommendation to Feature

#5 - 2013-08-15 10:42 AM - Anonymous

- Target version deleted (150)

#10 - 2015-01-15 11:27 AM - Jean Backer

- Assignee set to Jean Backer

#11 - 2015-01-15 11:28 AM - Jean Backer

- Status changed from Acknowledged to Assigned

#13 - 2015-10-07 03:59 PM - Jean Backer

- Status changed from Assigned to Resolved

#14 - 2015-10-07 03:59 PM - Jean Backer

- Impact updated

#15 - 2016-07-11 03:19 PM - Stuart Sides

- Status changed from Resolved to Closed

- Target version set to 3.4.13 (FY16 R3 2016-08-31 Aug)

Closed for Debbie by Stuart